

CLAIMS:

What is claimed is:

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1. A frequency-sensitive electrical circuit, comprising:
First and second inputs;
at least one transformer circuit having a first winding connected to the first input
and a second winding connected to the second input;
a first load connected in parallel to the first winding;
a second load connected in parallel to the second winding;
first and second outputs connected to the first and second windings, respectively;
and
a capacitor connected between the first and second outputs.
 2. The circuit of claim 1, wherein a signal carrying both voice and data information
is received at the first and second inputs.
 3. The circuit of claim 1, wherein the circuit filters a lower-frequency portion of a
signal received at the first and second inputs.
 4. The circuit of claim 1, wherein the circuit reduces the distortion of a signal
received at the first and second inputs and delivered at the first and second outputs.
 5. The circuit of claim 1, further comprising a third output, connected via a second
capacitor to the first input, and a fourth output, connected via a third capacitor to the
second input.

6. A frequency-sensitive electrical circuit, comprising:
a first stage having first and second inputs and first and second outputs, the first stage comprising
a parallel-connected first inductor and first resistor, connected between the first input and first output,
a parallel-connected second inductor and second resistor, connected between the second input and second output, the first and second inductors being inductively coupled, and
a capacitor connected between the first and second outputs.

7. The circuit of claim 6, further comprising:
a second stage having first and second inputs and first and second outputs, the first stage comprising
a parallel-connected first inductor and first capacitor, connected between the first input and first output,
a parallel-connected second inductor and second capacitor, connected between the second input and second output, the first and second inductors being inductively coupled, and
a third capacitor connected between the first and second outputs,
wherein the first and second outputs of the second stage are operatively connected to the first and second inputs of the first stage, respectively.

1 8. The circuit of claim 6, further comprising:

2 a third stage having first and second inputs and first and second outputs, the first
3 stage comprising

4 a first inductor connected between the first input and first output,

5 a second inductor connected between the second input and second output, the first
6 and second inductors being inductively coupled, and

7 a capacitor connected between the first and second outputs,

8 wherein the first and second outputs of the third stage are operatively connected to
9 the first and second inputs of the first stage, respectively.

10 9. The circuit of claim 6, wherein a signal carrying both voice and data information
11 is received at the first and second inputs.

12 10. The circuit of claim 6, wherein the circuit filters a lower-frequency portion of a
13 signal received at the first and second inputs.

14 11. The circuit of claim 6, wherein the circuit reduces the distortion of a signal
15 received at the first and second inputs and delivered at the first and second outputs.

16 12. The circuit of claim 6, further comprising a third output, connected via a second
17 capacitor to the first input, and a fourth output, connected via a third capacitor to the
18 second input.

1 13. A telecommunications signal splitter, comprising:
2 First and second signal inputs;
3 A) at least one transformer circuit having a first winding connected to the first signal
4 input and a second winding connected to the second signal input;
5 a first load connected in parallel to the first winding;
6 a second load connected in parallel to the second winding;
7 first and second outputs connected to the first and second windings, respectively;
8 and
9 a capacitor connected between the first and second outputs.

1 14. The circuit of claim 13, wherein a signal carrying both voice and data information
2 is received at the first and second inputs.

3 15. The circuit of claim 13, wherein the circuit filters a lower-frequency portion of a
4 signal received at the first and second inputs.

5 16. The circuit of claim 13, wherein the circuit reduces the distortion of a signal
6 received at the first and second inputs and delivered at the first and second outputs.

1 17. The circuit of claim 13, further comprising a third output, connected via a second
2 capacitor to the first input, and a fourth output, connected via a third capacitor to the
3 second input.